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Student Engagement: A Means to Many Desirable Ends

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What do we need to know to enhance college student learning and increase graduation rates?

Certainly we need good measures of what students know and can do, especially tools that assess the skills and competencies students acquire during college that are relevant to the changing demands and challenges of the 21st century workplace and family and civic life. At the same time, information about outcomes alone does not necessarily point to the institutional policies and practices that need to be changed to enhance student learning and increase baccalaureate degree attainment. Just as Baldrige Criteria emphasize linking processes with outputs, without knowing how students spend their time and what institutions emphasize in their educational programs, it is almost impossible to connect student outcomes such as test results to the teaching and learning activities that account for the scores. Without this information, it is hard to know where to target institutional effort and resources in order to enhance student learning.

Many studies show that one key factor related to graduation rates, student satisfaction, and the quality of undergraduate education is *student engagement*—the time and effort students devote to their studies and related educationally relevant activities.

The engagement premise is deceptively simple, even self-evident: The more students study a subject, the more they learn about it. Likewise, the more students practice and get feedback on their writing or problem solving, the more adept they become. In fact, summarizing thousands of studies of college student learning and development, Pascarella and Terenzini (2005, p. 602) concluded that “individual effort or engagement is the critical determinant of the impact of college” and that institutions should “focus on the ways in which an institution can shape its academic, interpersonal, and extracurricular offerings to encourage *student engagement* (emphasis added). The very act of being engaged also adds to the foundation of skills and dispositions that is essential to live a productive, satisfying life after college. As Lee Shulman (2002) explained, students who are involved in educationally productive activities in college are developing habits of the mind and heart that enlarge their capacity for continuous learning and personal development.

Today, I want to briefly describe two related national initiatives that have implications for higher education accountability and improvement. Over the past few years, these two projects, the National Survey of Student Engagement (NSSE – “nessie”)

designed for four-year colleges and universities and the Community College Survey of Student Engagement (CCSSE – “cessie”), have begun to change the national conversation about what constitutes quality in undergraduate education while at the same time providing hundreds of colleges and universities with data they can use almost immediately to improve the quality of the student experience.

NSSE, CCSSE, and Student Engagement

The primary activity of both the NSSE and CCSSE projects is to conduct annual surveys of undergraduates. These instruments are relatively short and collect information about – among other things -- how students spend their time, how much they read, write, and study, and what they think about their college experience. Students’ responses about the extent to which they participate in these and other important areas of effective educational practice serve as a proxy for quality in undergraduate education. Moreover, colleges and universities can take immediate action when they know which areas of student engagement need attention. So, although the NSSE and CCSSE surveys do not assess student learning outcomes per se, they do provide the kind of information every school needs to have to know where to focus its efforts to improve student learning and success in college.

Jump started by foundation support (Pew Charitable Trusts, Lumina Foundation for Education), both NSSE and CCSSE are now entirely self supporting through institutional participation fees. That is, schools find the data so useful that they are willing to pay for it. About 65% of the items on CCSSE correspond to engagement items on NSSE. With survey development support from the Lumina Foundation, CCSSE added research-based items related to student retention, including attention to key academic and support services that are crucial to the disproportionately high-risk student population in most community colleges.

Since the beginning, NSSE and CCSSE focused on two goals. First, the projects were designed to be authoritative sources of context-sensitive, relevant information about the quality of undergraduate education, measuring student behaviors and institutional actions that matter to student learning and success in college. Second, we wanted institutions to actually *use* their student engagement results to improve the student experience and educational effectiveness

There is a fair amount of evidence that we are accomplishing both goals and contributing to the accountability and improvement agenda for postsecondary education.

For example, since 2000, more than 1,000 different baccalaureate-granting colleges and universities in the US and Canada have used NSSE at least once. The more than one million students in the national database represent about three quarters of undergraduate FTE in the four-year institution sector in the US. About 560 schools are involved in 2006, marking the sixth consecutive year that the number of participating schools increased.

Since 2002, 470 different community colleges from 46 states and one Canadian province have used CCSSE, with the respondents representing a total credit enrollment in

those colleges of more than 2.7 million students. CCSSE's unduplicated college membership over the same period represents approximately 42% of U.S. community colleges (1,113 accredited, public associate-degree-granting institutions) and 44% of their 6.3+ million credit students. Moreover, 18 states have committed to using CCSSE state- or system-wide, and discussions are underway with several more.

In recent years NSSE, CCSSE, and the importance of student engagement have been featured in the national media including *New York Times*, *Wall Street Journal*, *USA Today*, *Washington Post*, *Newsweek*, *The Chronicle of Higher Education*, and the PBS special, *Declining by Degrees*. In his new book, Derek Bok (2006) recommended that governing board members encourage their presidents to use NSSE as a tool to evaluate the quality of the undergraduate experience.

Using Student Engagement Data for Improvement and Accountability

NSSE and CCSSE calculate “benchmark” scores for institutions of different sizes and missions, taking into account the characteristics of their students. This allows schools to readily identify the areas where their students are performing above or below the levels of other schools like them. Many schools leverage local interest in and use of the information by comparing their results with those from peer institutions, sometimes by participating in a consortium which allows them to ask additional questions of common interest so that the results can be compared to other schools in the consortium. More than 70 NSSE consortia have formed over the years, ranging from engineering colleges, HBCUs and women colleges, to AAU research universities, to 32 AASCU institutions involved in the American Democracy Project. CCSSE consortia include geographically-based schools, small and rural colleges; Hispanic-Serving community colleges; colleges emphasizing service learning, and the 35 colleges participating in the national “Achieving the Dream” initiative. Comparing student engagement information against institutions with similar missions and student characteristics adds legitimacy and often a sense of urgency to institutional improvement efforts.

Institutional Use of Student Engagement Data

Schools get their own data so they can further analyze their own results. Faculty members in particular want to be able to disaggregate the results by major field because of the proximal links between their own work and student performance. A dean of undergraduate studies might find, for example, that students majoring in the social sciences--or even a single field such as sociology--on her campus are less likely to prepare two or more drafts of a paper or assignment before turning it in than is true of students majoring in the humanities, or a single field such as philosophy. Alternatively, the dean might compare her campus findings with those at peer campuses, generally or even within a field or discipline.

Knowing about an issue, of course, does not mean that it will be addressed, let alone resolved. But it is much more likely that faculty members will take steps to remedy a concern when they see hard evidence that compares responses from students in their

discipline with those from students in other disciplines within their institution or that compares those responses to ones from undergraduates at peer colleges or universities with which they compete. Some examples:

- Indiana University Purdue University Indianapolis (IUPUI) uses NSSE along with locally developed surveys to monitor the effectiveness of its University College, student satisfaction with various services and the campus environment, and to monitor its progress on three of the institution's six Principles for Undergraduate Learning: (a) communication skills by looking at student responses to perceived gains items related to writing, speaking, and using technology; (b) critical thinking by looking at perceived gains in thinking critically and analytically and at opinions about the emphasis in courses on applying, analyzing, synthesizing, and making judgments; and (c) understanding of society and culture by looking at responses about conversations with other students with different beliefs and values or of different races or ethnicities, whether the institution encourages contact among students from different backgrounds, and students' perceived gains in understanding people of other racial and ethnic backgrounds.
- The University of Hawaii-Hilo used NSSE results to demonstrate to faculty the extent to which they use effective teaching practices. Experienced UH Hilo faculty then led workshops about those practices, using examples such as a large lecture class where active learning was fostered by calling students up on stage to dance out the structure of DNA. Other faculty discussed ways to involve students in community research projects.
- Georgia Tech University created a \$250,000 fund to support faculty research that involved undergraduates in response to NSSE data showing that first-year students were not working with faculty members on research as extensively as the institution thinks desirable.
- Longwood College incorporates its NSSE results into their institution-specific performance measures required by the Virginia State Council of Higher Education.
- At Oregon State University, the Vice Provost for Student Affairs handed over the NSSE data to a group of student leaders with the charge they review the findings and make recommendations to improve the student experience. Their efforts culminated with a well-prepared and received report to the Provost's Council at the end of the spring 2003 academic year.
- Tallahassee Community College (FL) and numerous other institutions have used CCSSE results as cornerstones for strategic planning (with a focus on strengthening student learning and success) and Quality Enhancement Plans, a requirement for reaffirmation of SACS accreditation.

- LaGuardia Community College (NY) has instituted a major new engagement strategy through their electronic portfolio initiative, which provides students with a tool for collecting their academic work, adding reflections on their learning, and posting their portfolios on the Internet. Over a three-year period, 2000 students have built ePortfolios and the eventual goal is to include all students. The college has compared *CCSSE* data for students who have developed ePortfolios versus those who have not yet done so. Participating students report higher engagement than the LaGuardia mean, which in turn exceeds the national mean, on key questions relating to academic challenge, such as “worked harder than you thought you could to meet an instructor’s standards or expectations” – 56% (vs. 48%); synthesizing and organizing ideas in new ways” – 66% (vs. 56%); and “making judgments about the value or soundness of information” – 59% (vs. 49%).
- At Valencia Community College (FL), a college-wide Institutional Effectiveness Taskforce recommended the use of *CCSSE* results as the basis for incentive pay that will be part of the faculty compensation program. After engaging faculty in review and discussion of survey results, specific improvement goals are set, and the performance pay (a collective incentive) will be implemented if the goals are met.

State and System Use

State systems are using results from NSSE and CCSSE for accountability.

- The Kentucky Postsecondary Council combines NSSE data with its own alumni satisfaction survey to inform one of its five key indicators of progress -- preparing Kentuckians for life and work. Another NSSE question contributes to Kentucky’s civic engagement measure. In addition, Kentucky uses the actual and predicted engagement scores that NSSE calculates to compare the performance of Kentucky public universities against the national average. The Kentucky Community and Technical College System initiated statewide use of CCSSE in 2006.
- The University of Texas system uses NSSE to meet its state’s mandate to obtain information from their “customers.” An accountability portfolio is presented annually to the state legislature and features an analysis of the experiences of first-generation students.
- The South Dakota University System incorporates NSSE data from its six campuses in analyses of first-to-second year persistence rates and results from the state’s required general education proficiency exam to assess the efficacy of curricular requirements.
- The Virginia Community College System is using *CCSSE* results from its colleges to focus efforts to improve student persistence and graduation rates – key goals in the system’s Dateline ’09 strategic plan.

- The Florida Department of Community Colleges and Workforce Education, with access to a strong student record database, is using CCSSE results along with data on student academic progress to better understand which educational practices appear to have significant impact on student success.
- Other systems that have adopted NSSE measures for performance reporting include the New Hampshire state universities, the Tennessee Higher Education Commission, Texas A&M University, University of Wisconsin, and University of North Carolina. Tennessee also uses CCSSE for performance reporting; and a number of other states/systems, including FL, CT, MA, RI, NH, VA, LA, IN, WI, ND, HI, KY, NM, and GA, are using the results for improvement purposes.

Additional examples of how individual colleges and universities as well as state systems are using their NSSE and CCSSE data for various purposes can be found in the NSSE and CCSSE annual reports as well as on their websites:

http://webdb.iu.edu/Nsse/?view=tools/using_nsse_data and <http://www.ccsse.org>.

To further demonstrate the relevance of student engagement to educational effectiveness, NSSE and CCSSE developed companion instruments to gather information from faculty about their teaching practices, how they spend their time, and how they perceive their students' educational experiences. Results are reported alongside results of the student survey so that faculty members and other academic leaders can see where there may be divergent perceptions of student experiences. In addition, NSSE will soon offer a Beginning College Student Survey of Student Engagement (BCSSE) and CCSSE an Entering Student Survey (ESS) to capture the earliest experiences of community college students during a critical time period when many students drop out.

Public Advocacy

Every time an institution discloses its student engagement results is an opportunity to help educate the public about the value of student engagement as a meaningful metric for defining and examining collegiate quality. From the outset, CCSSE's National Advisory Board and staff made a strong commitment to public reporting of survey results. Reporting is accomplished via the CCSSE website, which also provides an interactive data search capacity that enables community colleges to benchmark effective educational practices.

NSSE encourages participating schools to share their results, *provided* that disclosure leads to a better understanding of collegiate quality and promote institutional improvement efforts. NSSE especially supports public reporting of student engagement results in ways that enable thoughtful, responsible institutional comparisons while encouraging and celebrating institutional diversity. An increasing number of NSSE schools are making some or all of their NSSE results available to the public by posting the information on websites or reporting it in alumni magazines or press releases.

Both NSSE and CCSSE advocate policies promoting responsible uses of survey data and opposing use of student engagement data for ranking colleges. In fact, one provocative research finding is that student engagement and the use of effective educational practices are unrelated to college rankings (Kuh & Pascarella, 2004; Pike, 2004).

Among other projects, NSSE is collaborating with the Institute for Higher Education Policy and the Alliance for Equity in Higher Education on the BEAMS Project (Building Engagement and Attainment of Minority Students). This is an effort to reduce the national gap in educational attainment for African-Americans, Hispanics, and Native Americans by increasing the number of students from these groups who earn bachelor's degrees. (www.aahe.org/BEAMS). Likewise, CCSSE is centrally involved in the national Achieving the Dream initiative, funded by the Lumina Foundation and other grantmakers and aimed at increasing successful outcomes for community college students while eliminating achievement gaps. These expanded work scopes are another indication that NSSE and CCSSE are an integral part of a national movement for using data to improve the undergraduate experience.

Recommendations

The experience of NSSE and CCSSE indicate that college and university faculty and staff members are willing to address accountability and institutional improvement mandates when the measures by which their work will be evaluated are demonstrably linked to desired student learning and personal development outcomes. Equally important, they want to be certain that the data used to judge the results of their efforts are used in responsible ways that help them improve their teaching and enhance the learning of their students. Information about student engagement is one such source of relevant information that is relatively expensive to obtain and immediately useful.

The Commission can give additional support to these needed efforts by considering ways to champion the following.

- ✚ *Create incentives for postsecondary institutions to regularly collect and use information about the student experience that research shows is linked to high levels of learning and personal development, persistence, and student success.*

NSSE and CCSSE are excellent tools, but not the only ones that provide useful information that institutions can use to improve. In addition, student engagement and outcomes data must be analyzed and interpreted in responsible ways that take into account the diversity of student backgrounds and abilities as well as institutional missions and resources. For example, an institution's *unadjusted* student engagement scores, test results, or graduation rates may not necessarily be the most appropriate indicators of how well an institution is doing by its students. Residual statistical models can be more revealing because they control for student background characteristics and entering ability as well as institutional characteristics such as size, control and resources to produce estimates of whether institutions are performing better or worse than they are predicted

to, given the nature of their students and their resources. Whatever measures are used, they should be calculated separately for groups of students with different background characteristics, such as race-ethnicity, gender, SES, first-generation status, and transfer status. Such analyses may raise nettlesome questions that have to be answered sooner or later related to articulation agreements and for performance indicator systems. For example, when evaluating the quality of the educational experience, how much responsibility for transfer student performance belongs to the institution, to the individual student, and to the other institutions transfer students have attended? This is especially important, given that three fifths of baccalaureate degree recipients attend two or more colleges and as many as one quarter takes classes at two or more different schools in the same academic term.

- ✚ *Encourage postsecondary institutions to use common reporting templates for student engagement and other indicators of student success such as persistence and educational attainment rates to make more transparent how well they are performing.*

One way to bring about more transparency of institutional performance is to gain agreement on a common template that schools can use to display their performance results. Along with student engagement data, other commonly used indicators of success include student retention and graduation. A “one size fits all” set of indicators will not likely be sufficient, given the increasing diversity of college students and the multiple, winding pathways they follow to a baccalaureate degree. Multiple sets of indicators will be needed to yield an accurate, albeit more complicated picture of the student experience and to document various measures of success for different types of institutions and students. The latter include student goal attainment, course retention, transfer rates and transfer success, success in subsequent course work, fall-to-fall persistence, degree/certificate completion, student satisfaction, student personal and professional development, citizenship and student involvement, student learning outcomes, and post-college outcomes including graduate school participation, employment, and orientation to lifelong learning.

- ✚ *Support development of state and institutional capacity for collecting, analyzing and using data for accountability and improvement purposes.*

One of the most powerful levers for institutional improvement is the use of credible data that tell a more comprehensive story of students’ educational experiences in our colleges and universities. To do this requires an expanded technological and human capacity for data collection and analysis, and there is presently an extraordinarily wide range in these capacities across both states and institutions, from paper and pencil operations conducted by a part-time faculty member to highly sophisticated research operations. Until colleges, universities and state systems have the capacity to routinely conduct longitudinal tracking of student cohorts, regularly elicit responses from students on surveys and other assessments, and *use* that data to engage faculty and student service professionals in discussion about strengths and needs for improvement, our ability to prompt significant institutional change will be severely limited. Helping to build data

systems and institutional research capacities is a highly appropriate role for the federal government.

- ✚ *Create incentives for high schools and postsecondary institutions to focus resources on disengaged students.*

Dramatic improvement in the overall quality of undergraduate education can be realized by focusing on the performance of students who are least engaged. Raising the engagement “floor” so to speak is a win-win situation for students and institutions because it will improve student learning and boost overall persistence and graduation rates. A disproportionate number of such students are men. Transfer students also are typically less engaged than students who start and stay at the same school.

- ✚ *Encourage postsecondary institutions to identify and ameliorate aspects of their cultures that discourage students from succeeding.*

Virtually every study of high performing organizations concludes that culture is a major factor in their success. Every college or university should know how its students make sense of and use the institution’s resources for learning and how organizational structures support or hinder student success. One approach is to systematically audit the extent to which conditions exist that promote or inhibit student engagement and success, such as described in the *Inventory for Student Engagement and Success* (Kuh, Kinzie, Schuh, & Whitt, 2005). For example, is the curriculum organized and delivered to facilitate student success, or does it present obstacles? Gateway courses in mathematics, for instance, often present an overwhelming amount of material and employ instructional approaches based on an assumption that not all students can master challenging mathematical concepts; this self-fulfilling prophecy results in a substantial fraction of students who do not master the material.

Conclusion

Colleges and universities cannot accurately gauge the effectiveness of their policies and practices in the absence of information about the educational processes and student activities that determine the quality of undergraduate education. NSSE and CCSSE can help document whether student behavior and institutional practices are headed in the right direction. They are widely used because they provide meaningful, relevant indicators of quality such as the extent to which students find the academic work challenging, the degree to which they are active learners, the extent of student-faculty interactions, the richness of the out-of-class experiences, the overall campus environment, the exposure to diverse cultural experiences, and the scope of technology uses.

NSSE and CCSSE are not perfect instruments to measure student engagement, and student engagement is not all there is to undergraduate education. But as Thomas Ehrlich (2004) said, they are “remarkably useful for everyone on a campus who wants to improve undergraduate education.” Equally important, NSSE and CCSSE are integral to the national movement to change the way people think and talk about quality in postsecondary education. In combination with other sources of information related to

student outcomes and other aspects of the undergraduate experience, student engagement data reveal the means and methods that enhance many dimensions of student success and institutional performance.

Resources

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